

FORM PTO-1449 (modified)  
To: U.S. Department of Commerce  
(PW FORM PAT-1449)  
Patent and Trademark Office



Atty. Dkt. No.	M#	Client Ref.
	281123	
Applicant: MAX		
Appln. No.: 09/941,545		
Filing Date: August 30, 2001		
Examiner: Unknown		
Group Art Unit: Unknown		

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Date: September 28, 2001 Page 1 of 1

## U.S. PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
CTB	AR 2,904,511	09/1959	DONATH			
	BR 2,974,102	03/1961	WILLIAMS			
	CR 3,027,320	03/1962	BUCHANAN			
	DR 3,119,771	01/1964	COTTLE			
	ER 3,119,772	01/1964	ETAL			
	FR 3,126,334	03/1964	HARLOW			
	GR 3,132,096	05/1964	WALTON			
	HR 3,148,143	09/1964	DONATH			
	IR 3,155,610	11/1964	WILLIAMS			
	JR 3,171,727	03/1965	ETAL			
	KR 3,214,371	10/1965	TUWINER			
	LR 3,217,505	11/1965	TUWINER			
	MR 3,243,966	04/1966	GLEW			
	NR 4,821,794	04/1989	TSAI et al.			
	OR 5,055,176	10/1991	SUGIER et al.			
	PR 5,304,356	04/1994	IJIMA et al.			
	QR 5,362,487	11/1994	SAKAI et al.			
	RR 5,448,892	09/1995	CHENG			
	SR 5,473,904	12/1995	GUO et al.			
	TR 5,553,456	09/1996	MCCORMACK			
	UR 5,660,603	08/1997	ELLIOT et al.			
	VR 5,873,262	02/1999	MAX et al.			
CTB	WR 6,106,595	08/2000	SPENCER			

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## FOREIGN PATENT DOCUMENTS

Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract	Translation Readily Available
XR				Enclosed	No
YR				Enclosed	No
ZR				Enclosed	No

## OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

CTB	AAR	Rautenbach et al., Entwicklung und Optimierung eines Hydrat-Verfahrens zur Meerwasserentsalzung, Chemie-Ing.-Techn 45 Jahrg. 1973/Nr. 5, pp. 259-254.		
CTB	BBR	Silber, Methane Cooled Desalination Method and Apparatus, USPTO, Defensive Publication T939, 007 - Published October 7, 1975		
CTB	CCR	Japanese Abstract, Journal Number: G0941AAK ISSN No: 0453-0683, 1995, vol. 42, No. 7. Accession Number: 95A0492545, File segment: JICST-E		



SEP 28 2001 CTB	DOR	EPO - Patent Abstracts of Japan, Publication No. 61136481, Publication date 24-06-86, Muneschichi, Concentration of Aqueous Solution English language abstract.				
CTB	GER	EPO - Patent Abstracts of Japan, Publication Number 11319805, Publication Date: 224-11-99, Yoshio, Separation of Gaseous Mixture Utilizing Gas Hydrate and Method for Desalting Seawater -English language abstract.				
CTB	FFR	XP-0021497 SU1328298 English language abstract.				
Examiner		Date Considered: 11/12/04				
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.						

CHESTER T. BARRY  
PRIMARY EXAMINER

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**INFORMATION DISCLOSURE STATEMENT  
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Applicant: MAX

Appln. No.: 09/941,545

Filing Date: August 30, 2001

1724

Date: December 5, 2001

Examiner: (Unknown)

Group Art Unit: 1704

**U.S. PATENT DOCUMENTS**

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
CTB	AR 6,180,843 B1	01/2001	Heinemann et al.			
	BR 6,028,234	02/2000	Heinemann et al.			
	CR 6,245,955 B1	06/2001	Smith			
	DR 3,308,063	03/1967	Hess et al.			
	ER 3,350,299	10/1967	Hess et al.			
	FR 3,350,300	10/1967	Hess et al.			
	GR 3,855,492	12/1974	Klass			
	HR 3,892,103	07/1975	Antonelli			
	IR 3,983,032	09/1976	Hess et al.			
	JR 4,170,328	10/1979	Kirk et al.			
	KR 4,392,959	07/1983	Coillet			
	LR 4,643,832	02/1987	Iiotakis et al.			
	MR 4,652,375	03/1987	Heilweil et al.			
	NR 4,670,159	06/1987	Garrett et al.			
	OR 4,767,527	08/1988	Iiotakis et al.			
	PR 5,037,555	08/1991	Pasternak et al.			
	QR 5,076,934	12/1991	Fenton			
	RR 5,128,042	07/1992	Fenton			
	SR 5,512,176	04/1996	Blair			
	TR 5,679,254	10/1997	Chakrabarti			
	UR 5,816,057	10/1998	Dickey et al.			
CTB	VR 6,296,060 B1	10/2001	McCaslin			

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**FOREIGN PATENT DOCUMENTS**

		Document Number	Date MM/YYYY	Country	Inventor Name		Abstract		Readily Available	
							Enclosed	No	Enclose	No
CTB	WR	JP55055125	04/1980	Japan	Kimura et al.		X			X
	XR	JP61025682	02/1986	Japan	Iwasaki et al		X			X
	YR	JP11319805	11/1999	Japan	O Yoshio		X			X
	ZR	JP2000202444	07/2000	Japan	Akine		X			X
	AAR	WO01/34267A1	05/2001	PCT	Gougel		X		X	
	BBR	JP59029078	02/1984	Japan	Futami et al.		X			X
CTB	CCR	JP58109179	06/1983	Japan	Fuchigami et al.		X			X

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

CTB DDR Russian Abstract Publication No. 2166348, May 10, 2001, Melnikov et al. X

Examiner

CHESTER T. BARRY

Date Considered:

1/12/04

\*EXAMINER: Initial if citation considered pertinent to subject matter under examination is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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**INFORMATION DISCLOSURE STATEMENT  
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Applicant: MAX

Appin. No.: 09/941,545

Filing Date: August 30, 2001

1724

Date: December 7, 2001

Page 1 of 1

Examiner: (Unknown)

Group Art Unit: 1754

**U.S. PATENT DOCUMENTS**

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR					
	BR					
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	LR					
	MR					
	NR					

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**FOREIGN PATENT DOCUMENTS**

	Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract	Translation Readily Available
					Enclosed	No
CTB	OR	SU997715	02/1983	Russia	Denisov et al.	X
LTB	PR	SU1006378	03/1983	Russia	Smirnov et al.	X
	QR					
	RR					
	SR					
	TR					
	UR					
	VR					
	WR					
	XR					

**OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)**

	YR			
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	CCR			
	DDR			

Examiner: *Chet...*

Date Considered: 1/12/01

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Applicant: MAX

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Filing Date: August 30, 2001

1724

Date: March 6, 2002

Page 1 of 3

Examiner: (Unknown)

Group Art Unit: (Unknown)

**U.S. PATENT DOCUMENTS**

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
CTB	AR 6,180,843 B1	01/2001	Heinemann et al.			
	BR 6,028,234	02/2000	Heinemann et al.			
	CR 6,245,955 B1	06/2001	Smith			
	DR 3,308,063	03/1967	Hess et al.			
	ER 3,350,299	10/1967	Hess et al.			
	FR 3,350,300	10/1967	Hess et al.			
	GR 3,856,492	12/1974	Klass			
	HR 3,892,103	07/1975	Antonelli			
	IR 3,983,032	09/1976	Hess et al.			
	JR 4,170,328	10/1979	Kirk et al.			
	KR 4,392,959	07/1983	Collet			
	LR 4,643,832	02/1987	Iniotakis et al.			
	MR 4,652,375	03/1987	Heilwell et al.			
	NR 4,670,159	06/1987	Garrett et al.			
	OR 4,767,527	08/1988	Iniotakis et al.			
	PR 5,037,555	08/1991	Pasternak et al.			
	QR 5,076,934	12/1991	Fenton			
	RR 5,128,042	07/1992	Fenton			
	SR 5,512,176	04/1996	Blair			
	TR 5,679,254	10/1997	Chakrabarti			
	UR 5,816,057	10/1998	Dickey et al.			
CTB	VR 6,296,060 B1	10/2001	McCaslin			

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**FOREIGN PATENT DOCUMENTS**

		Document Number	Date MM/YYYY	Country	Inventor Name	Abstract		Readily Available	
						Enclosed	No	Enclose	No
CTB	WR	JP55055125	04/1980	Japan	Kimura et al.	X			X
	XR	JP61025682	02/1986	Japan	Iwasaki et al	X			X
	YR	JP11319805	11/1999	Japan	O Yoshio	X			X
	ZR	JP2000202444	07/2000	Japan	Akine	X			X
	AAR	WO01/34267A1	05/2001	PCT	Gougel	X		X	
	BBR	JP59029078	02/1984	Japan	Futami et al.	X			X
CTB	CCR	JP58109179	06/1983	Japan	Fuchigami et al.	X			X

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

CTB	DDR Russian Abstract Publication No. 2166348, May 10, 2001, Me'nikov et al.	X			X
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Examiner

CTB

CHESTER T. BARRY

Date Considered:

4/10/02 - 12/04

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**INFORMATION DISCLOSURE STATEMENT  
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Applicant: MAX
Appln. No.: 09/941,545
Filing Date: August 30, 2001 1724
Examiner: (Unknown) Group Art Unit: (Unknown)

Date: March 6, 2001 Page 3 of 3

**U.S. PATENT DOCUMENTS**

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
CTB	AR 4,267,022	05/1981	PITCHER	203	100	
	BR 4,376,462	03/1983	ELLIOT ET AL.	166	267	
	CR 4,424,858	01/1984	ELLIOT ET AL.	166	52	
	DR 6,089,022	07/2000	ZEDNIK ET AL.			
	ER 6,112,528	09/2000	RIGBY			
	FR 6,158,239	12/2000	MAX ET AL.			
	GR 5,167,838	12/1992	WILENSKY			
CTB	HR 4,278,645	07/1981	FILSS			
	IR					

**FOREIGN PATENT DOCUMENTS**

	Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract	Translation Readily Available
					Enclosed	No
CTB	JR 1 320 134 GB	06/1973	GB	Webber et al.	X	X
CTB	KR WO 01/04056	01/2001	PCT	MAX (with substitute sheets)	X	X
	LR					

**OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)**

CTB	MR	Max et al., "Extraction of Methane from Oceanic Hydrate System Deposits", Offshore Technology Conference, Paper No. 10727, pp. 1-8 (1999)	
	NR	Max and Lowrie, "Oceanic Methane Hydrates: A "Frontier" Gas Resource", <u>Journal of Petroleum Geology</u> , Vol. 19(a), pp. 41-56 (January 1996)	
	OR	Max and Dillon, "Oceanic Methane Hydrate: The Character of the Blake Ridge Hydrate Stability Zone, and the Potential for Methane Extraction," <u>Journal of Petroleum Geology</u> , Vol. 21(3), July 1998, pp. 343-357	
	PR	Max, M.D., "Oceanic Methane Hydrate: The Character of the Blake Ridge Hydrate Stability Zone, and the Potential for Methane Extraction," Author's correction, <u>Journal of Petroleum Geology</u> , Vol. 22(2), pp. 227-228 (April 1999).	
	QR	Max and Chandra, "The Dynamic Oceanic Hydrate System: Production Constraints and Strategies," Offshore Technology Conference, Paper No. 8884, pp. 1-10 (1998)	
	RR	Max et al., "Methane-Hydrate, A Special Clathrate: Its Attributes and Potential," <u>Naval Research Laboratory</u> , NRL/MR/6101-97-7926, pp. 1-74 (February 28, 1997)	
CTB	SR	Max and Lowrie "Oceanic Methane Hydrate Development: Reservoir Character and Extraction," <u>Naval Research Laboratory (NRL)</u> , OTC 8300, pp. 235-240.	

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Examiner: <u>CTB</u> <b>CHESTER T. BARRY</b>	Date Considered: <u>1/2/04</u>
*EXAMINER: Initial if citation complies with Rule 1.01 of the Manual of Patent Examining Procedure (MPEP) § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	

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MAR 06 2002

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1724

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Page 2 of 3

Examiner: (Unknown)

Group Art Unit: (Unknown)

**U.S. PATENT DOCUMENTS**

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date
C-TD	AR 3,675,436	07/1972	GANIARIS			
	BR 3,712,075	01/1973	SMITH ET AL.			
	CR 3,813,892	06/1974	JOHNSON			
	DR 3,992,170	11/1976	KARNOFSKY			
	ER 4,207,351	06/1980	DAVIES			
	FR 4,678,583	07/1987	WILSON, III, ET AL.			
	GR 4,686,833	08/1987	HINO ET AL.			
	HR 4,696,338	09/1987	JENSEN ET AL.			
	IR 4,718,242	01/1988	YAMAUCHI ET AL.			
	JR 5,110,479	05/1992	FROMMER ET AL.			
	KR 5,159,971	11/1992	CHIEN C. LI			
	LR 5,364,611	11/1994	IJIMA ET AL.			
	MR 5,444,986	08/1995	HINO			
C-TD	NR 5,497,630	03/1996	STEIN ET AL.			

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

OR	
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Examiner

CHESTER T. BARRY

Date Considered:

12/04

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Applicant: MAX
Appn. No.: 09/941,545
Filing Date: August 30, 2001
Examiner: (Unknown)      Group Art Unit: 1704 1724

Date: March 13, 2002      Page 1 of 1

**U.S. PATENT DOCUMENTS**

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
CJS	AR 3,371,035	2/1968	JACOBS et al.			
	BR 5,397,553	3/1995	SPENCER et al.			
	CR 5,562,891	10/1996	SPENCER et al.			
CJS	DR 135,001	01/1873	MEYLERT			
	ER					
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	KR					
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	NR					

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**FOREIGN PATENT DOCUMENTS**

		Document Number	Date MM/YYYY	Country	Inventor Name		Abstract		Readily Available	
							Enclosed	No	Enclose	No
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	TR									
	UR									
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	WR									
	XR									

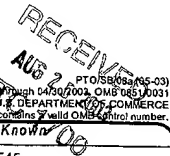
OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

YR							
ZR							
AAR							
BBR							
CCR							
DDR							

Examiner **CHESTERT, BARRY**      Date Considered: 3/12/04

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Approved for use through 04/30/2003. OMB 0851-0025

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Complete if Known *00*

Application Number	09/941,545
Filing Date	08/30/2001
First Named Inventor	MICHAEL DAVID MAX
Art Unit	1704 → 1724
Examiner Name	(Unknown) - BARRY
Attorney Docket Number	018984-0281123

*(Use as many sheets as necessary)*

Sheet	1	of	1
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**\*EXAMINER:** Initially if reference considered whether a citation is required under MPEP 609. Draw line through citation if not in conformance and not considered. Indicate copy of this form will need completion by applicant. \* Applicant's unique citation designation number (optional). \* See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.01. Enter Office Code of document, by the two-letter code (WIPO Standard ST.3). \* For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \* Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. \* Applicant to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.197 and 1.198. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. - 118 and 37 CFR - 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Continuation of Attachment(s) 6). Other IDSs: 8/29/01, 12/5/02, 12/7/02, 3/2/03

IDS's :

9/28/01	2 pgs
12/5/01	1 pg.
12/7/01	1 pg
3/6/02	3 pg.
3/13/02	1
8/22/03	1